



OIPE

RAW SEQUENCE LISTING DATE: 03/18/2002 PATENT APPLICATION: US/10/090,185 TIME: 16:07:14

```
1 <110> APPLICANT: Zhang, Xiaokui
      2
             Wrzeszczynska, Melissa H
     3
             Horvath, Curt M
             Darnell Jr., James E
     5 <120> TITLE OF INVENTION: METHODS FOR IDENTIFYING MODULATORS OF TRANSCRIPTIONAL
ACTIVATOR PROTEIN
             INTERACTIONS
     7 <130> FILE REFERENCE: 600-1-253
     8 <140> CURRENT APPLICATION NUMBER: 10/090,185
     9 <141> CURRENT FILING DATE: 2002-03-04
                                                         ENTERED
    11 <150> PRIOR APPLICATION NUMBER: 09/387,418
    12 <151> PRIOR FILING DATE: 1999-08-31
    15 <160> NUMBER OF SEQ ID NOS: 43
    16 <170> SOFTWARE: PatentIn Ver. 2.0
    18 <210> SEQ ID NO: 1
   19 <211> LENGTH: 39
    20 <212> TYPE: DNA
   21 <213> ORGANISM: Mus musculus
   22 <220> FEATURE:
   23 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
            cacccaacag ccgccgtagc aacagagaag cagvagatg
   27 <210> SEQ ID NO: 2
                                                                              39
   28 <211> LENGTH: 39
   29 <212> TYPE: DNA
   30 <213> ORGANISM: Mus musculus
   31 <220> FEATURE:
   32 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
   33 <400> SEQUENCE: 2
           gccgtagtga cagagaaggc acagatgttg gagcagcat
   36 <210> SEQ ID NO: 3
                                                                              39
   37 <211> LENGTH: 51
  38 <212> TYPE: DNA
  39 <213> ORGANISM: Mus musculus
  40 <220> FEATURE:
  41 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
  42 <400> SEQUENCE: 3
           gccgtagtga cagagaagca gcagatggca gagcagcatc ttcaggatgt c
  45 <210> SEQ ID NO: 4
                                                                             51
  46 <211> LENGTH: 34
  47 <212> TYPE: DNA
  48 <213> ORGANISM: Mus musculus
  49 <220> FEATURE:
  50 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
```

RAW SEQUENCE LISTING DATE: 03/18/2002 PATENT APPLICATION: US/10/090,185 TIME: 16:07:14

	O> SEQUENCE: 4												
52	atgttggagc agcatgctca ggatgtccgg aagc 34												
	D> SEQ ID NO: 5												
	L> LENGTH: 35												
	TYPE: DNA												
57 <2	3> ORGANISM: Mus musculus												
	0> FEATURE:												
59 <2	3> OTHER INFORMATION: Description of Artificial Sequence: Primer												
60 <4	100> SEQUENCE: 5												
61	gcagcatctt caggatgcac ggaagcgagt gcagg												
	0> SEQ ID NO: 6												
	11> LENGTH: 58												
	<pre><212> TYPE: DNA</pre>												
66 <2	<213> ORGANISM: Mus musculus												
	7 <220> FEATURE:												
68 <2	8 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer												
69 <4	<400> SEQUENCE: 6												
70													
	> SEQ ID NO: /												
	> LENGTH: 17												
	> TYPE: DNA												
75 <2	<213> ORGANISM: Mus musculus												
76 <2	> FEATURE:												
77 <23	> OTHER INFORMATION: Description of Artificial Sequence: Primer												
78 <40	> SEQUENCE: 7												
79	aatccttctg ggaattc 17												
	<210> SEQ ID NO: 8												
82 <21	<211> LENGTH: 154												
83 <21	3 <212> TYPE: PRT												
84 <21	> ORGANISM: Mus musculus												
85 <40	> SEQUENCE: 8												
86	Met Ala Gln Trp Asn Gln Leu Gln Gln Leu Asp Thr Arg Tyr Leu Lys												
87	1 5 10 15												
88	Gln Leu His Gln Leu Tyr Ser Asp Thr Phe Pro Met Glu Leu Arg Gln												
89	20 25 30												
90	Phe Leu Ala Pro Trp Ile Glu Ser Gln Asp Trp Ala Tyr Ala Ala Ser												
91	35 40 45												
92	Lys Glu Ser His Ala Thr Leu Val Phe His Asn Leu Leu Gly Glu Ile												
93	50 55 60												
94	Asp Gln Gln Tyr Ser Arg Phe Leu Gln Glu Ser Asn Val Leu Tyr Gln												
95	b) 70 ar												
96	His Asn Leu Arg Arg Ile Lys Gln Phe Leu Gln Ser Arg Tyr Leu Glu												
97	85 90 95												
98	Lys Pro Met Glu Ile Ala Arg Ile Val Ala Arg Cys Leu Trp Glu Glu												
99													
100	Ser Arg Leu Gln Thr Ala Ala Thr Ala Ala Gln Gln Gly Gln												
101	115 120 125												
102	Ala Asn His Pro Thr Ala Ala Val Val Thr Glu Lys Gln Gln Met Leu												
103	130 135 140												
	140												

RAW SEQUENCE LISTING DATE: 03/18/2002 PATENT APPLICATION: US/10/090,185 TIME: 16:07:14

```
104
           Glu Gln His Leu Gln Asp Val Arg Lys Arg
 105
           145
 107 <210> SEQ ID NO: 9
 108 <211> LENGTH: 271
 109 <212> TYPE: PRT
 110 <213> ORGANISM: Mus musculus
 111 <400> SEQUENCE: 9
 112
           Arg Cys Leu Trp Glu Glu Ser Arg Leu Leu Gln Thr Ala Ala Thr Ala
 113
 114
           Ala Gln Gln Gly Gln Ala Asn His Pro Thr Ala Ala Val Val Thr
 115
                        20
                                             25
 116
           Glu Lys Gln Gln Met Leu Glu Gln His Leu Gln Asp Val Arg Lys Arg
 117
 118
           Val Gln Asp Leu Glu Gln Lys Met Lys Val Val Glu Asn Leu Gln Asp
 119
 120
           Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met Gln
 121
                                70
 122
           Asp Leu Asn Gly Asn Asn Gln Ser Val Thr Arg Gln Lys Met Gln Gln
 123
                            85
 124
           Leu Glu Gln Met Leu Thr Ala Leu Asp Gln Met Arg Arg Ser Ile Val
125
                                           105
126
           Ser Glu Leu Ala Gly Leu Leu Ser Ala Met Glu Tyr Val Gln Lys Thr
127
                                       120
                                                            125
128
           Leu Thr Asp Glu Glu Leu Ala Asp Trp Lys Arg Arg Pro Glu Ile Ala
129
                                   135
                                                        140
130
          Cys Ile Gly Gly Pro Pro Asn Ile Cys Leu Asp Arg Leu Glu Asn Trp
131
                               150
                                                   155
          Ile Thr Ser Leu Ala Glu Ser Gln Leu Gln Thr Arg Gln Gln Ile Lys
132
133
                           165
                                               170
          Lys Leu Glu Glu Leu Gln Gln Lys Val Ser Tyr Lys Gly Asp Pro Ile
134
135
                      180
                                           185
          Val Gln His Arg Pro Met Leu Glu Glu Arg Ile Val Glu Leu Phe Arg
136
137
                                       200
138
          Asn Leu Met Lys Ser Ala Phe Val Val Glu Arg Gln Pro Cys Met Pro
139
                                                       220
140
          Met His Pro Asp Arg Pro Leu Val Ile Lys Thr Gly Val Gln Phe Thr
141
                              230
                                                   235
          Thr Lys Val Arg Leu Leu Val Lys Phe Pro Glu Leu Asn Tyr Gln Leu
142
143
                          245
                                               250
144
          Lys Ile Lys Val Cys Ile Asp Lys Asp Ser Gly Asp Val Ala Ala
145
                                           265
147 <210> SEQ ID NO: 10
148 <211> LENGTH: 393
149 <212> TYPE: PRT
150 <213> ORGANISM: Mus musculus
151 <400> SEQUENCE: 10
152
          Leu Arg Gly Ser Arg Lys Phe Asn Ile Leu Gly Thr Asn Thr Lys Val
153
154
         Met Asn Met Glu Glu Ser Asn Asn Gly Ser Leu Ser Ala Glu Phe Lys
```

RAW SEQUENCE LISTING DATE: 03/18/2002 PATENT APPLICATION: US/10/090,185 TIME: 16:07:14

								•	-	_	(•			
155				2	0					25	,						
156	Hi	s Le	eu Th	ır Le	u Ar	g Gl	u Gl	n A	ra ('vs	. Gl	τ λ α	n Cl	61	3	30	la Asn
157																	
158	Су	s As	p Al	a Se	r Le	u Il	e Va	1 T	hr (31 m	Gli	ם. ז	n Bi	4 T 2	., T1	_ m1	ır Phe
159																	
160	Gl	u Th	ır Gl	u Va	1 Ty:	r Hi	s Gl	n G	lv i	eu	Lv	s T1	υ 2 Λ 🗅	u n to			nr His
161						,						.,	5				
162	Se	r Le	u Pr	o Va	l Va	l Va	1 11	e Se	er A	sn	Ile	- Cv:	5 G1	n Mo	+ D~		80 sn Ala
163					Ο.	,					ui	1				_	
164	Tr	p Al	a Se	r Il	e Lei	ı Trı	э Ту	r As	sn M	let	Lei	ነ ጥh [.]	r Aei	n Ac	n Dr	- T-	5 S Asn
165																	
166	Va	l As	n Ph	e Ph	e Thi	C Lys	s Pr	o Pr	o I	le	Glv	7 Thi	r ጥr:	n Aei	7 C I	U n 17a	l Ala
167																	
168	Gl	u Va	l Lei	u Se	r Trp	Glr	n Phe	e Se	r s	er	Thr	Thi	^ T.v.s	ı Δr	, , (1)	T.	u Ser
169																	
170	Ile	e Gl	u Gli	n Lei	ı Thr	Thr	Lei	ı Al	a G	lu	Lys	Leu	LTei	, i Gly	z Dra	o C1	y Val
171																	
172	Ası	ı Ty:	r Sei	r Gl	/ Cys	Gln	Ile	e Th	r T	rp	Ala	Lvs	Phe	_ Cv2	2 T.321	- C1	160 u Asn
173																	
174	Met	: Ala	ı Gly	Lys	Gly	Phe	Ser	: Ph	e Ti	rp	Val	Trp	Leu	Asr	Δgr	1/ 11/	5 e Ile
175																	
176 177	Asp	Leu	ı Val	. Lys	Lys	Tyr	Ile	Le	u Al	La	Leu	Trp	Asn	Glu	Gla	, 7 Tr.	r Ile
178																	
179	мет	GIY	Phe	: Ile	Ser	Lys	Glu	Ar	g G]	lu	Arg	Ala	Ile	Leu	Ser	· Th	. Lys
180																	
181	225	Pro	GIY	Thr	Phe	Leu	Leu	Arg	g Ph	ıe	Ser	Glu	Ser	Ser	Lvs	Gli	Gly
182						200						7775					
183	СТУ	val	rnr	Phe	Thr	Trp	Val	Glı	ı Ly	s .	Asp	Ile	Ser	Gly	Lvs	Thr	240 Gln
184																	
185	116	GIII	ser	val	GLu	Pro	Tyr	Thr	Ly	S	Gln	${\tt Gln}$	Leu	Asn	Asn	Met	Ser
186																	
187	1116	лта	275	тте	Ile	Met	GLy	Tyr	. TÀ	s :	Ile	Met	Asp	Ala	Thr	Asn	Ile
188																	
189	LCu	290	ser	PIO	Leu	val	Tyr	Leu	Ту	r I	Pro	Asp	Ile	Pro	Lys	Glu	Glu
190							293						200				
191	305	1 110	Gly	nys	Tyr	Cys	Arg	Pro	Gl	u S	Ser	Gln	Glu	His	${\tt Pro}$	Glu	Ala
192						$J \perp U$						21 =					
193		-10	GLY	261	Ala 325	Ата	Pro	Tyr	Lei	ı I	ys	Thr	Lys	Phe	Ile	Cys	Val
194																	
195		0	1111	340	Cys	ser	ASN	Thr	116	≥ A -	sp	Leu	Pro	Met	Ser	${\tt Pro}$	Arg
196																	
197			355	JCI	Leu 1	met '	GIII	Pue	GIY	7 A	sn A	Asn	Gly	Glu	Gly	Ala	Glu
198																	
199	-	370		1	Gly (- T11	эле 375	GIU	ser	L	eu :	l'hr	Phe .	Asp	Met	Asp	Leu
200		-			Ala 1		,,,						380				
201	385					390	-er	FIO	met								
203 <210>	SEQ	ID N	0: 1	1													
204 <211>	LENG'	TH:	154														

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/090,185

DATE: 03/18/2002

TIME: 16:07:14

```
205 <212> TYPE: PRT
 206 <213> ORGANISM: Mus musculus
 207 <400> SEQUENCE: 11
 208
           Met Ser Gln Trp Tyr Glu Leu Gln Gln Leu Asp Ser Lys Phe Leu Glu
 209
           Gln Val His Gln Leu Tyr Asp Asp Ser Phe Pro Met Glu Ile Arg Gln
 210
 211
                                             25
           Tyr Leu Ala Gln Trp Leu Glu Lys Gln Asp Trp Glu His Ala Ala Asn
 212
 213
           Asp Val Ser Phe Ala Thr Ile Arg Phe His Asp Leu Leu Ser Gln Leu
 214
 215
                                     55
           Asp Asp Gln Tyr Ser Arg Phe Ser Leu Glu Asn Asn Phe Leu Leu Gln
 216
 217
                                 70
                                                      75
           His Asn Ile Arg Lys Ser Lys Arg Asn Leu Gln Asp Asn Phe Gln Glu
 218
 219
           Asp Pro Ile Gln Met Ser Met Ile Ile Tyr Ser Cys Leu Lys Glu Glu
 220
 221
           Arg Lys Ile Leu Glu Asn Ala Gln Arg Phe Asn Gln Ala Gln Ser Gly
 222
 223
                                        120
           Asn Ile Gln Ser Thr Val Met Leu Asp Lys Gln Lys Glu Leu Asp Ser
 224
 225
                                    135
 226
           Lys Val Arg Asn Val Lys Asp Lys Val Met
 227
                               150
 229 <210> SEQ ID NO: 12
 230 <211> LENGTH: 268
 231 <212> TYPE: PRT
 232 <213> ORGANISM: Mus musculus
233 <400> SEQUENCE: 12
           Ser Cys Leu Lys Glu Glu Arg Lys Ile Leu Glu Asn Ala Gln Arg Phe
234
235
          Asn Gln Ala Gln Ser Gly Asn Ile Gln Ser Thr Val Met Leu Asp Lys
236
237
          Gln Lys Glu Leu Asp Ser Lys Val Arg Asn Val Lys Asp Lys Val Met
238
239
          Cys Ile Glu His Glu Ile Lys Ser Leu Glu Asp Leu Gln Asp Glu Tyr
240
241
                                    55
242
          Asp Phe Lys Cys Lys Thr Leu Gln Asn Arg Glu His Glu Thr Asn Gly
243
          Val Ala Lys Ser Asp Gln Lys Gln Glu Gln Leu Leu Leu Lys Lys Met
244
245
          Tyr Leu Met Leu Asp Asn Lys Arg Lys Glu Val Val His Lys Ile Ile
246
247
                                           105
          Glu Leu Leu Asn Val Thr Glu Leu Thr Gln Asn Ala Leu Ile Asn Asp
248
249
                                       120
          Glu Leu Val Glu Trp Lys Arg Arg Gln Gln Ser Ala Cys Ile Gly Gly
250
251
                                  135
252
          Pro Pro Asn Ala Cys Leu Asp Gln Leu Gln Asn Trp Phe Thr Ile Val
253
                              150
          Ala Glu Ser Leu Gln Gln Val Arg Gln Gln Leu Lys Lys Leu Glu Glu
254
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/090,185

DATE: 03/18/2002 TIME: 16:07:15